

**THAT WHICH IS CLAIMED IS:**

1. An aircraft in-flight entertainment system comprising:
  - a satellite television (TV) receiver;
  - at least one passenger video display
  - 5 connected to said satellite TV receiver; and
  - a processor connected to said satellite TV receiver for determining an undesired condition and for generating responsive thereto a substitute image on said at least one passenger video display rather than
  - 10 permit display of an undesired image which would otherwise be produced.
2. An aircraft in-flight entertainment system according to Claim 1 wherein said satellite TV receiver comprises a direct broadcast satellite (DBS) receiver.
3. An aircraft in-flight entertainment system according to Claim 1 wherein the undesired condition is a weak received signal strength condition; and wherein said processor determines the weak received
- 5 signal strength condition.
4. An aircraft in-flight entertainment system according to Claim 1 wherein the undesired condition is a component malfunction; and wherein said processor determined the component malfunction.
5. An aircraft in-flight entertainment system according to Claim 1 wherein the undesired image is a degraded program image.

6. An aircraft in-flight entertainment system according to Claim 1 wherein the undesired image is default text message image.

7. An aircraft in-flight entertainment system according to Claim 1 further comprising a storage device connected to said processor for storing the substitute image.

8. An aircraft in-flight entertainment system according to Claim 1 wherein said satellite TV receiver generates a plurality of individual video channels; and wherein said processor determines the  
5 undesired condition for each of the individual video channels.

9. An aircraft in-flight entertainment system according to Claim 1 wherein said satellite TV receiver generates a plurality of video channels; and wherein said processor determines the undesired  
5 condition for the plurality of video channels.

10. An aircraft in-flight entertainment system according to Claim 1 wherein said at least one passenger video display comprises a plurality of passenger seatback video displays.

11. An aircraft in-flight entertainment system according to Claim 1 wherein said at least one passenger video display comprises a plurality of passenger video displays, and further comprising:  
5 a plurality of signal distribution devices;  
and  
a cable network connecting said satellite TV receiver to said signal distribution devices, and

connecting said signal distribution devices to said  
10 passenger video displays.

12. An aircraft in-flight entertainment system according to Claim 1 wherein the aircraft is a narrow-body aircraft having a single passenger aisle.

13. An aircraft in-flight entertainment system comprising:

a satellite television (TV) receiver;  
a plurality of passenger video displays  
5 connected to said satellite TV receiver; and  
a processor connected to said satellite TV receiver for determining a weak received signal strength condition and for generating responsive thereto a substitute image on said passenger video  
10 displays prior to display of an undesired image which would otherwise be produced.

14. An aircraft in-flight entertainment system according to Claim 13 wherein said satellite TV receiver comprises a direct broadcast satellite (DBS) receiver.

15. An aircraft in-flight entertainment system according to Claim 13 wherein the undesired image is a degraded program image.

16. An aircraft in-flight entertainment system according to Claim 13 wherein the undesired image is default text image.

17. An aircraft in-flight entertainment system according to Claim 13 further comprising a

storage device connected to said processor for storing the substitute image.

18. An aircraft in-flight entertainment system according to Claim 13 wherein said satellite TV receiver generates a plurality of individual video channels; and wherein said processor determines the  
5 undesired condition for each of the individual video channels.

19. An aircraft in-flight entertainment system according to Claim 13 wherein said satellite TV receiver generates a plurality of video channels; and wherein said processor determines the undesired  
5 condition for the plurality of video channels.

20. An aircraft in-flight entertainment system according to Claim 13 further comprising:  
a plurality of signal distribution devices;  
and  
5 a cable network connecting said satellite TV receiver to said signal distribution devices, and connecting said signal distribution devices to said passenger video displays.

21. An aircraft in-flight entertainment system according to Claim 13 wherein the aircraft is a narrow-body aircraft having a single passenger aisle.

22. A method for operating an aircraft in-flight entertainment system comprising a satellite television (TV) receiver, and at least one passenger video display connected to the satellite television  
5 receiver, the method comprising:  
determining an undesired condition; and

generating a substitute image on the at least  
one passenger video display rather than permit display  
of an undesired image which would otherwise be  
10 produced.

23. A method according to Claim 22 wherein  
the satellite TV receiver comprises a direct broadcast  
satellite (DBS) receiver.

24. A method according to Claim 22 wherein  
the undesired condition is a weak received signal  
strength condition; and wherein determining comprises  
determining the weak received signal strength  
5 condition.

25. A method according to Claim 22 wherein  
the undesired condition is a component malfunction; and  
wherein determined comprises determining the component  
malfunction.

26. A method according to Claim 22 wherein  
the undesired image is a degraded program image.

27. A method according to Claim 22 wherein  
the undesired image is default text message image.

28. A method according to Claim 22 further  
comprising storing the substitute image.

29. A method according to Claim 22 wherein  
the satellite TV receiver generates a plurality of  
individual video channels; and wherein determining  
comprises determining the undesired condition for each  
5 of the individual video channels.

30. A method according to Claim 22 wherein the satellite TV receiver generates a plurality of video channels; and wherein determining comprises determining the undesired condition for the plurality  
5 of video channels.

31. A method according to Claim 22 wherein the aircraft is a narrow-body aircraft having a single passenger aisle.

32. An aircraft in-flight entertainment system comprising:

a satellite television (TV) receiver for generating a plurality of programming channels;

5 a moving map image generator for generating a flight information channel including a moving representation of the aircraft position on a map image; at least one passenger video display connected to said satellite TV receiver and said moving  
10 map image generator; and

at least one passenger control unit associated with a respective passenger video display for permitting passenger selection of one of the programming channels and flight information channel for  
15 display on the respective passenger video display.

33. An aircraft in-flight entertainment system according to Claim 32 wherein said satellite TV receiver comprises a direct broadcast satellite (DBS) receiver.

34. An aircraft in-flight entertainment system according to Claim 32 wherein said moving map image generator comprises a processor for determining an aircraft position during flight.

35. An aircraft in-flight entertainment system according to Claim 34 further comprising a global positioning system (GPS) receiver connected to said processor for determining the aircraft position.

36. An aircraft in-flight entertainment system according to Claim 35 further comprising a steerable antenna connected to said satellite TV receiver; and wherein steering of said steerable  
5 antenna is based upon signals from said GPS receiver.

37. An aircraft in-flight entertainment system according to Claim 34 wherein said processor further determines at least one of an aircraft direction, aircraft speed and aircraft altitude for  
5 display with the moving map image.

38. An aircraft in-flight entertainment system according to Claim 32 wherein said at least one passenger video display comprises a plurality of passenger seatback video displays.

39. An aircraft in-flight entertainment system according to Claim 32 wherein said at least one passenger video display comprises a plurality of passenger video displays, and further comprising:  
5 a plurality of signal distribution devices;  
and

a cable network connecting said satellite TV receiver and said moving map image generator to said signal distribution devices, and connecting said signal  
10 distribution devices to said passenger video displays.

40. An aircraft in-flight entertainment system according to Claim 32 wherein the aircraft is a narrow-body aircraft having a single longitudinal passenger aisle.

41. A method for operating an aircraft in-flight entertainment system comprising a satellite television (TV) receiver for generating a plurality of video programming channels, at least one passenger  
5 video display connected to the satellite TV receiver, and at least one passenger control unit associated with a respective passenger video display for permitting passenger selection of programming channels for display on the respective passenger video display, the method  
10 comprising:

generating a flight information channel including a moving representation of the aircraft position on a map image; and

15 permitting passenger selection of the flight information channel on the passenger video display also using the at least one passenger control unit.

42. A method according to Claim 41 wherein the satellite TV receiver comprises a direct broadcast satellite (DBS) receiver.

43. A method according to Claim 41 wherein generating the flight information channel comprises determining an aircraft position during flight.

44. A method according to Claim 41 wherein generating the flight information channel comprises determining at least one of an aircraft direction, aircraft speed and aircraft altitude for display with  
5 the moving map image.



45. A method according to Claim 41 wherein  
the aircraft in-flight entertainment system further  
comprises a global positioning system (GPS) receiver;  
and wherein generating the flight information channel  
5 comprises determining aircraft position based on  
signals from the GPS receiver.

46. A method according to Claim 41 wherein  
the at least one passenger video display comprises a  
plurality of passenger seatback video displays.

47. A method according to Claim 41 wherein  
the aircraft is a narrow-body aircraft having a single  
passenger aisle.